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ABSTRACT

There is a growing movement toward highly structured, competitive sports for children aged 7-12, who are at a crucial stage of physical and psychological development. Social play and games have important socialization and identity-formation functions. One argument supporting highly competitive sports for children is that they provide additional play opportunities. In fact, organized sports may reduce play opportunities, by leading children away from free and spontaneous games. A second argument is that more highly skilled athletes result from highly competitive sports, although this does not seem to be true for team sports. A third argument is that organized sports are safer and healthier than the sandlot variety. There is considerable evidence, however, to support the conclusion that highly competitive sports can be harmful both physiologically and psychologically. Lastly, it is argued that it is socially advantageous for children to learn to compete early. (PB)

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PSYCHOLOGICAL AND PHYSICAL IMPLICATIONS OF HIGHLY COMPETITIVE SPORTS FOR CHILDREN

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In post World War II America, there has been a growing movement towards ever increasing participation in highly structured, competitive sports for boys in the age group 7-12. Since this is a rather drastic departure from our earlier heritage of game playing and since in this respect we differ from most other cultures, the phenomenon deserves serious consideration.

Competition and Children's Sports

A 1956 Report on School Health (19) characterized highly competitive sports for children as follows: "The chief stress is placed on winning with excessive emotional pressures applied by teachers, parents and others, and with parental interest going to the point of expressing undue concern over winning." Scott (23) has indicated that the Lombardian ethic has so permeated the American sport culture that it extends even to the little leagues. The statement: "Winning isn't everything, its the only thing," leads to a product-oriented system in which "the opponent is viewed at best as an obstacle, at worst as an enemy that must be overcome in order to achieve victory."

There has been little tendency on the part of most parents to question the value of such an ethic to the health and well-being of their children because competitiveness is a cultural value held by most Americans. It is seen by most to be basic and even biological in its relationships to human nature. While the prevailing opinions of psychologists are varied with respect to the origins of competitive behavior, the ubiquity of competition in our culture is at least suggestive of factors that are biologically inherent to human nature. And in the context of American History such beliefs become translated into such ideas as the folklore of how we "won the west."

Psychologists of the psychoanalytic school (4) indicate that competition plays a role in the development of the ego. A child's self-concept is strengthened or placed in jeopardy by his successes or failures. Early

in life the child is forced to compete with other siblings or with one parent for the love of the other.

In contrast to those who might wish to show that competition is normal and healthy, some authorities feel that it is debasing and a social evil. In a review of the sociological literature, Sadler (21) has called for a change in lifestyle:

> As I have attempted to suggest, some of the most horrendous problems encountered not only in sports but throughout our society are in part due to the unprincipled expansion and virtual domination of our lifestyles by the spirit of competition. That has set the standard. Competition has become a primary value which operates in many personalities as a major drive. I have not charged that sports have caused this condition; in fact the institution of sports have become a victim of it. Ironically, like much organized religion in our society, it mindlessly expresses, endorses, and revitalizes the very spirit of competition which is becoming a sigrificant factor in its (and our) own undoing.

It is a popular thought that "competition is a law of the jungle, cooperation is the law of civilization." Skinner (24) has expressed contempt for competition in his behavioristic novel, Walden II. In his classical experiments, Sherif (22) demonstrated that competition among normal 11-year old boys results in mustrust and interpersonal hostility.

No matter what the cause or what the justification, there are at present over three million 7-12 year old boys playing organized baseball (more than half playing in Little League). Over one million play organized football while organized basketball and ice hockey are growing rapidly, as are age-group swimming, tennis, golf and gymnastics (18).

The practical question is how to redirect these organized sports to take into consideration the well being of the children involved. Initially we will examine the child psychologically and physically and then react to some of the common arguments of those who promote highly competitive sports for children.

The Psychological Condition at Age 7-12

From a developmental perspective, the child at this age is emerging from a stage of his life in which parents were the dominant others into one in which his peer group is increasingly significant. Social play and games provide situations which are crucially important to socialization and to identity formation.

In psychoanalytic terms, this is the latency stage or post-oedipal period. The crises and conflicts of family relations have been at least temporarily resolved with the formation of the conscience or "super ego." This is essentially an internalized set of rules which, by acknowledging certain limits and prohibitions, enables the child to be sure of love and approval. This period may be a crucial time in moral development.

With these new tools of human relations, the child is eager to test their validity in other social situations. Games are particularly effective in providing a protected, time-limited simulation of principles of social interaction and "fair play." As such they are a primary socializing agent. Team games in particular provide for "power-sharing" thus enabling the individual to experience collective achievement. Similarly, "failures" in group games are reduced in importance because losses are also shared and because they are otherwise inconsequential; part of the security and appeal of a child-organized game lies in the fact that there is no fear of loss of love due to performance. That adult-organized sports threaten this security will be considered shortly.

Erikson (12), who discusses eight progressive stages in the development of the ego, describes this particular period as "socially a most decisive

stage" during which inferiority is a dominant fear. This concern is most often expressed in group play and games where a child has the opportunity to "test himself" in relation to others. Others' attitudes toward both himself and toward common experiences contribute to the development of a child's self-concept and provide a mirror image of himself.

In a game with other children, "getting along" and "making the game work" are important to the individual, for this setting is rich with information about himself and his abilities. Unlike the parent who accepts the child on the basis of love, the peer will relate to the child on the basis of what he offers the group. Thus, mutuality and interpersonal dependence are also developed quite naturally in this setting. Children readily accept rules from each other and make their own agreements for "the greater good" and they rarely require standards imposed by adults.

It appears then that much of the psychological development and socialization that occurs during this stage is a result of the child's entrance into the culture of his peer group. It is unlikely that adult intervention into the realm of childrens games will do much to improve on its contribution to the growth of children, but there is a distinct possibility that if there is interference in these activities, damage may be done to the natural process of growing up.

The Physical Condition at Age 7-12

Perhaps the most important concept which must be understood by the adult who supervises the activity of children is that they are not miniature adults. Activities which may be appropriate for the adult are simply too strenuous for the normal development of many children.

Success in motor skill performance is related to the body type of the child. Body type or bone structure is inherited and cannot be altered by training. Physically the child's height and weight are increasing at a fairly constant rate with a large growth spurt around the age of twelve. While boys are usually stronger, girls are often taller and heavier than boys. Boys are twice as strong at age 11 as at age 6. While their bones are harder, they are easier to break. During the growth years, bone growth is more rapid than muscle growth. Temporarily the bones and joints lack the normal protection of covering muscles and supporting tendons thus increasing the tendency for dislocations of joints and permanent injury to bone. Frequently, injury to the growth region of bone, the epiphysis, goes undetected until later in life. Within any age range there is a wide individual variation in maturation levels. Chronological age is by no means an accurate indicator of physiological age. Thus when children 10-12 compete, the older child could be literally twice as strong due to body type, age differences, the growth spurts at adolescence and relative maturation rates.

Analyzing the Rhetoric of Advocates of Childhood Sports

Taking into consideration the psychological and physical characteristics of children 7-12 years old, let us examine some of the typical arguments offered in support of highly competitive sports for children:

1. "Sports provide additional play opportunities for children."

Devereux (7) has pointed to the lack of play in our culture as compared with cultures in other parts of the world. Eiferman (9,10) and the Opies (16) have described the rich culture of spontaneous games in other

cultures while Sutton-Smith and Rosenberg (27) note a gradual decline in the number of games being played in America. Devereux (7) has speculated that T.V. and the enormous importance placed on big time sports may have led children in their play time away from free and spontaneous games towards a more rigid system of structured sport. Skubic (25) reported that of 96 little leaguers interviewed, 91 indicated that over half of their leisure time was spent playing baseball. Thus, organized sports for children may actually reduce play opportunities.

In behaviorist terms, it has been shown repeatedly that success is the best vehicle for continued learning. Crucial attitudes are being developed toward physical activity. The child who continually fails in motor skills may lower his level of aspiration, relative to physical development. Level of aspiration, body image and self-image or self-concept are related concepts, each contingent in this time period on peer group acknowledgement. The child who is exposed to an environment in which he can't be successful (such as happens frequently in little league), is quite likely to respond defensively and express hatred for all physical activity. Clearly, one of the most condemning features of "little leagueism" is the fact that the child who needs physical activity the most is often shunted away from exercise by the competitive nature of the sport. Coaches of little league often are not sensitive to the needs of the little obese boy or the frail child who may have had virtually no experience in the motor skills needed for success.

2. "More highly skilled athletes result from these types of programs."

The defense that more highly skilled players are a result of highly

competitive sports for children must be examined carefully. The following statements should be prefaced by the fact that little literature is available to support or contradict the authors' opinions.

In certain sports such as swimming, gymnastics, golf and tennis participation at an early age does appear to pay large dividends. The world records and general improvements in play in these areas are testament to the above statement; but in team sports such as baseball and football one is hard pressed to find a relationship between competition at an early age and future success. Why the difference? First, children have always played baseball and football in the local playground as opposed to the more specific environment needed to play tennis, swim, etc. Second, it is a mathematical fact that there simply are not enough qualified coaches to meet the crunch of three million boys playing organized baseball. Furthermore, in contrast to age-group programs which are often quite lucrative to the coach, there is no economic incentive to get the truly qualified coach to participate in little league baseball. Even if he does, only the boys on his own team will be likely to benefit which is in contrast to the aforementioned age-group programs where a talented coach can reach hundreds of children in a summer.

Still another common criticism from high school and other coaches of adolescents is that "by the time they get to me they're burned out." The young man who has been exposed to rigid authoritarian training since the age of three or four may have reached a saturation point especially when he sees the benefits of the social interaction available to his age group. Thus for a large number of such athletes, early training often results in

later hostility to the skills which they have acquired.

Finally, it should be noted that there are studies which support the hypothesis that significant physiological benefits result from endurance training at an early age (11,15). Thus, sport participation requiring great levels of working capacity such as swimming and running may indeed result in greater performance levels at maturity (if the invidual hasn't already given up because of the psychological and social problems attending such vigorous training). Since sports such as baseball and football do not call for great levels of aerobic capacity n such benefits could be attributed to these sports (5).

3. "Organized sports are safer and healthier than the sandlot variety."

There is considerable e lence to support the conclusion that highly competitive sports are often harmful to both physiological and psychological growth and development. With respect to physical damage, the most widely researched sport is that of baseball. Adams (1,2,3) has shown that the excessive repetitive strain to the elbow in pitching by children of little league age can produce severe bone and joint abnormalities. In a study of 162 boys ages 8-14 (3), he was able to demonstrate such damage in all of the 80 pitchers and in only a small percentage of the non-pitching baseball players or a control group. Slocum and Larsen (26), have isolated a common epipheseal injury which occurs in children 9-15, in the knee area as a result of landing from a jump such as in basketball. Rose et al. (20) have warned of the danger of cardiac contusions resulting from spearing in football. Brogden et al. (6) and Dotter (8) have coined the terms "little leaguers elbow" and "little leaguers shoulder" to describe common injuries

found in baseball players. Torg et al (28) recently completed a study in which the incidence of injuries in a league characterized by a lack of high pressure were fewer and less serious than those occuring to boys subjected to the vigorous competition of traditional Little League." They summarized this issue when they concluded:

> What then is the difference between pitching in the Little League as compared to the Lighthouse program (non-competitive)? Having considered all factors, we believe that the major difference is the circumstances under which the two groups participate. Specifically, Little Leaguers must compete to make the team, must compete to play in each game, and are subjected to intense pressures to win by adult coaches and spectators. On the other hand, the Lighthouse Boys Club members are automatically assigned to a team and must play at least three and one half innings of each game by Club regulations. The general attitude is one of participation for the sake of recreation rather than competition (28).

Psychological damage is far more difficult to measure; but several authorities (7,13) have noted that while normal game playing allows the child to experiment with his body and with his environment within a "safe", non-judgemental environment, the child who "strikes out" in front of the whole town may be subjected to the type of ridicule he simply is not emotionally equipped to handle.

Piaget (17) has actually made a case that through free game playing the child may be making moral judgements which contribute to the development of the superego. An example might be the case of pitching more slowly to one who has little skill; a striking contrast to the "win, at any cost" behavior so pervasive in competitive sports.

Recently Friedman has characterized a behavioral characteristic which seems to be a factor in the etiology of Coronary Heart Disease. "Type A behavior" is characterized by excessive time urgency, drive and competitiveness. Boyer (5) has alluded to the present topic in describing Type A

behavior as follows:

The CHD prone personality has been studied by Dr. Meyer Friedman. Excessive sense of time urgency, drive and competitiveness Type A behavior pattern, tension-related risk factors. In childhood it begins in school with unrelenting pressure from parents and teachers for high scholastic standing and grade points. Time urgency, competitive striving and a demanding schedule of after school activities make growing up a grim and joyless time of life. Up-tight children are being raised by up-tight parents who even direct the children's recreational activities into up-tight games. Examples of these up-tight games are Little League Baseball and Pop Warner Football. These games at best are poor fitness activities and contribute nothing to cardiovascular or muscular endurance. Most of the time they are highly stress-producing because of the demand by parents to see their child win at any cost. Watching the emotionally charged parents at the usual Little League game explains how many children find physical activity neither relaxing nor enjoyable. These highly competitive, stressful organized adult controlled sports programs for children actually discourage the continuation of physical fitness and healthful physical pursuits later in life. It is not rational to believe that we can raise our children to be highly competitive, highly stressed and frequently emotionally charged up and expect them to reach maturity calm, serene and at peace with themselves with unscathed coronary arteries.

Joe Paterno the highly successful head football coach at Penn State (13) was quoted recently as follows:

Whatever happened to the good old days when if you felt like playing baseball you would round up your buddies, get a bat and ball and would go out and play. What do we do now? We dress up our kids in uniforms, give them professional equipment, tell them where to play, when to play, organize their games for them, give them officials and put them in the hands of a coach who doesn't know the first thing about the sport or what's good for an 8 year old.

4. "Children are going to have to learn how to compete; it is better to learn it early than later on in life."

This is perhaps the most common of all the arguments used to promote "little leagueism." It is equivalent to thoughts of teaching a 2-year-old to swim by throwing him into an olympic pool or teaching him to read by presenting him with War and Peace. In other words, there is no acknowledgement of principles of learning (shaping and reinforcement), of intellectual development (gradual assimilation); and of emotional development (the gradual experience of stress to develop coping mechanisms), all of which are well

established.

This is a crucial time for normal development. To the extent that a child is thrown into an environment which he finds impossible to handle emotionally, the results may be devastating. As he grows and matures he can more fully cope with his physical limitations. Furthermore, he may simply be a slow maturer, but if he is exposed to failure at an early age the damage is already done by the time he has "caught up." Finally, to the extent that he is taking his free time to compete he may be robbed of the developmental advantages referred to earlier which may arise from free play.

Summary and Recommendations

If there was an opportunity to make drastic social changes, perhaps the abolishment of childhood sports would be recommended. Speaking pragmatically, however, it appears that childhood sports are culturally ingrained at present and will remain with us for some time. Therefore we should strive to at least minimize the damage being done.

In keeping with the research and thoughts presented in this paper we wish to make the following recommendations which should be followed in an attempt to more fully safeguard the physical and psychological welfare of our children.

1. Every league should have a physician who makes policy concerning medical checkups, health hazards, physical and emotional development of players, etc. He should be familiar with the psychological development of children and be able to advise coaches on such matter.

2. Coaches should be encouraged to develop skill and competencies which will be of assistance in dealing with children to include: concepts in child development, athletic training, first aid, exercise physiology, motor learning and skills in the particular sport.

3. Our colleges should undertake to offer courses appropriate to teach the aforementioned principles to individuals of varying educational backgrounds.

4. Physical examinations should be mandatory.

5. Sports associated with heavy exercise should be preceded by a graduated 3 week conditioning program to be supervised by a qualified individual.

6. Programs should be wide and comprehensive to include:
   a. both sexes
   b. a wide variety of individual and team sports
   c. many teams
   d. no exclusion (e.g. cutting) of eligible players
   e. participation by everyone in a given percentage of every game
   f. random assignment of players to teams

7. Mimicking of the styles of professional athletes (e.g. spearing football, unnecessary boarding in hockey, etc.), should be guarded against by coaches.

8. Coaches should encourage players to report elbow or shoulder pain.

9. Specific regulations should be instituted in given sports where appropriate.
   a. Baseball players should not be allowed to pitch baseball for more than 3 innings per game.
   b. The curve ball in baseball should be outlawed.
   c. Tackle football should be replaced by flag football.

Larsen and McMahon (14) summarized a recent paper as follows:

Children develop readiness for sports, as their maturation, agility, and coordination allow them. With supervision and direction, training and encouragement, and participation and self-discipline, they are going to learn to enjoy a balance of work and play, and thus enjoy life.

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